

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A remote control device with displays and ball switches, comprising:

a case;

a machine selection wheel switch section situated inside of said case, some parts of the machine selection wheel switch section being exposed through the front face of said case and containing a first wheel operation section, a first click encoder and a first push sensor;

a menu selection wheel switch section which contains a second wheel operation section, a second click encoder and a second push sensor;

a function selection ball switch section situated inside of said case, some parts of the function selection ball switch section being exposed through the front face of said case;

a CPU which inputs, outputs and controls electrical signals generated by rotation of said machine selection wheel switch section, menu selection wheel switch section and function selection ball switch section;

a signal transmitting section being connected to an output of the CPU, and a memory having built-in machine, menu and function selection programs;

a click sound generation section having a speaker; and

a display section situated at an upper section of said case, the display section displaying information that is responsive to the rotation of the machine selection wheel switch section, the menu selection wheel section and the function selection ball switch section.

2. (Previously Presented) A remote control device with displays and ball switches, comprising:

a case;

a display section situated at upper section of the front face of said case;

a machine selection wheel switch section situated inside of said case, some parts of the machine selection wheel switch section being exposed through the front face of said case and containing a first wheel operation section, a first click encoder and a first push sensor;

a menu selection wheel switch section which contains a second wheel operation section, a second click encoder and a second push sensor;

a function selection ball switch section situated inside of said case, some parts of the function selection ball switch section being exposed through the front face of said case,

wherein said function selection ball switch section further comprises:

a PCB having a though-hole and a hinge section at one side;

first to fourth fixtures located diagonally on an upper face of the PCB;

third to sixth click encoders facing said first to fourth fixtures;

an operation section located between said first to fourth fixtures and said third to sixth click encoders and further comprising a plurality of rotational axes;

a ball situated on the through-hole and being in contact with an outer periphery of said rotational axes;

a third push sensor located on a bottom face of the PCB and being switched on/off by a support plate that further comprises a stopper with a support ball which supports said ball;

a CPU which inputs, outputs and controls electrical signals generated by rotation of said machine selection wheel switch section, menu selection wheel switch section and function selection ball switch section;

a signal transmitting section being connected to an output of the CPU, and a memory having built-in machine, menu and function selection programs; and

a click sound generation section having a speaker.

3. (Previously Presented) A remote control device with displays and ball switches, comprising:

a case;

a display section situated at upper section of the front face of said case;

a machine selection wheel switch section situated inside of said case, some parts of the machine selection wheel switch section being exposed through the front face of said case and containing a first wheel operation section, a first click encoder and a first push sensor;

a menu selection wheel switch section which contains a second wheel operation section, a second click encoder and a second push sensor;

a function selection ball switch section situated inside of said case, some parts of the function selection ball switch section being exposed through the front face of said case, wherein said display section further comprises:

a first display area which displays a program name and a machine name;

a second display area which displays a program list and a menu;

a third display area which displays a function of said function selection ball switch section; and

a fourth display area which displays a condition of the operating remote control device;

a CPU which inputs, outputs and controls electrical signals generated by rotation of said machine selection wheel switch section, menu selection wheel switch section and function selection ball switch section;

a signal transmitting section being connected to an output of the CPU, and a memory having built-in machine, menu and function selection programs; and

a click sound generation section having a speaker.

4. (Currently Amended) The remote control device as claimed in claim 3, wherein said machine name and program name in said first display area can be scrolled up/down according to the rotation direction of said machine selection wheel switch section, ~~and~~, a matching number of arrows corresponding to the number of hidden machine name and program name ~~are~~ is displayed at the top and bottom end of the display, and[[,]] the selected part in the middle is indicated by a shaded block and the menu list of selected machines and programs are displayed in the second display area.

5. (Currently Amended) The remote control device as claimed in claim 3, wherein the menu name in said second display area can be scrolled up/down according to the rotation direction of the menu selection wheel switch section, ~~and~~ a matching number of arrows corresponding to the number of hidden menu name is displayed at the top and bottom end of the display, and[[,]] the function of the function selection ball switch section with respect to the selected menu is displayed in third display area at the same time.

6. (Currently Amended) The remote control device as claimed in claim 3, wherein in connection with said first display area, either a menu or a program of the selected machine is displayed in the second display area.

7. (Previously Presented) The remote control device as claimed in claim 3, wherein in connection with said second display area, the function of said function selection ball switch section of the selected menu is displayed in the third display area.

8. (New) The remote control device as claimed in claim 1, wherein the first and second wheel operation sections rotate when wheels of the machine selection wheel switch section and the menu selection wheel switch section are pressed, and a value of the rotation of the first and second wheel operation sections is detected by the first and second click encoders to scroll to a program name, a machine name, a program list or a menu display in the display section.

9. (New) The remote control device as claimed in claim 8, wherein the program name or the machine name are scrolled up or down when the wheel of the machine selection wheel switch section is rotated in up or down directions, respectively.

10. (New) The remote control device as claimed in claim 8, wherein the program list or the menu display are scrolled up or down when the wheel of the menu selection wheel switch section is rotated in up or down directions, respectively.

11. (New) The remote control device as claimed in claim 1, wherein the click sound generation section produces a click sound by a plurality of click encoders, wherein different sounds are produced based on a direction of operation of the function selection ball switch section.

12. (New) The remote control device as claimed in claim 9, wherein contents of work which the function selection ball switch section is capable of performing are displayed in the display section.